

## PROFESSIONAL EXPERIENCE

Climate Ocean and Sea Ice Modeling (COSIM) project

Fluid Dynamics and Solid Mechanics Group

Los Alamos National Laboratory

Los Alamos, NM (3/2008 – present)

Title: Post Doctoral Research Fellow

Duties: Development and application of three-dimensional, predictive ice-flow models for the purpose of predicting changes in global sea level as a result of changes in ice sheet volume.

Supervisors: Bill Lipscomb, Phil Jones

Bristol Glaciology Centre

School of Geographical Sciences

University of Bristol

Bristol, U.K. (8/2006 – 2/2008)

Title: Research Associate

Duties: Development and application of a higher-order, three-dimensional, ice-flow model of the Greenland ice sheet for the purpose of understanding current and future changes in ice sheet volume.

Supervisor: Tony Payne

The Department of Earth and Space Sciences

University of Washington

Seattle, Washington (6/2001 – 6/2006)

Title: Graduate Research and Teaching Assistant

Duties: Development and application of higher-order, two-dimensional, ice-flow models for the purpose of interpretation of ice-core records and radio-echo sounding data, ice-core site selection, and investigations into the controls on ice-stream flow; scientific programming; scientific writing for journal publication; presentations at scientific conferences; preparing and presenting lecture and lab materials for undergraduate courses in earth science

Advisors: Howard Conway, Edwin Waddington

SAIC General Sciences Corporation, NASA Goddard Space Flight Center

Greenbelt, MD (9/1998 – 6/2001)

Title: Programmer/Analyst

Duties: Support of physical glaciology research including: polar field work; GPS surveying and processing; shallow ice core recovery/processing; scientific programming for data processing and analysis; scientific writing for journal publication

Supervisor: Patricia Vornberger (SAIC-GSC), Robert Bindshadler (NASA)

Byrd Polar Research Center and Department of Geological Sciences

The Ohio State University, Columbus, OH (1/1996 - 9/1998)

Title: Graduate Research Assistant

Duties: Support of physical glaciology research including: polar field work; GPS surveying and processing; shallow

ice core recovery/processing; satellite image processing and analysis; computer programming for data processing

and analysis; scientific writing for journal publication

Advisors: Ian Whillans (academic and field research), Gordon Hamilton (field research)

Juneau Icefield Research Program, University of Idaho and University of Alaska, S.E.

Alaska/British Columbia (6/1996 - 8/1996)

Title: Graduate Teaching Assistant

Duties: Assistance in supervising college undergraduate and high school student summer research in geology and glaciology; field party leadership; facilities and logistic operations

Supervisor: Maynard Miller (JIRP), Gretchen Weeks (field and facilities support)

## **EDUCATION**

The University of Washington: Ph.D. Geophysics (10/2006)

The Ohio State University: M.Sc. Geology (12/1998)

The University of North Carolina at Wilmington: B.Sc. Geology (7/1995)

## **SCHOLARSHIPS & AWARDS**

- National Academy of Sciences Kavli Fellow, 2008
- Los Alamos National Laboratory, Directors Postdoctoral Fellow, 2008
- David Johnston Scholarship, Dept. of Earth and Space Sciences, Univ. of Washington, 2002
- Ohio State University Dept. Geological Sciences, Graduate Student Achievement award
- North Carolina Systems Wide Field Camp scholarship, 1995
- REU scholarship, 1994, Juneau Icefield Research Program
- UNCW Dept. of Earth Sciences, Student Achievement award, 1994

## **PROFESSIONAL SOCIETIES**

American Geophysical Union

European Geophysical Union

International Glaciological Society

## **CONTACT INFORMATION**

Stephen Price

COSIM project

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## PUBLICATIONS

- Price, S.F. 2009. From the front. *Nature Geosc.*, **2**(1), doi:10.1038/ngeo424.
- Price, S.F., A.J. Payne, G.A. Catania, and T.A. Neumann. 2008. Seasonal acceleration of inland ice via longitudinal coupling to marginal ice. *J. Glaciol.*, **54**(185), 213-219.
- Price, S.F., H. Conway, E.D. Waddington, and R.A. Bindschadler. 2008. Model investigations of inland migration of fast-flowing outlet glaciers and ice streams. *J. Glaciol.*, **54**(184), 49-60.
- Price, S.F., E.D. Waddington, and H. Conway. 2007. A full-stress, thermomechanical flowband model using the finite-volume method. *J. Geophys. Res.*, **112**, F03020, doi:10.1029/2006/JF000724.
- Price, S.F., H. Conway, and E.D. Waddington. 2007. Evidence for late Pleistocene thinning of Siple Dome, West Antarctica. *J. Geophys. Res.*, **112**, F03021, doi:10.1029/2006/JF000725.
- Price, S.F. and J.S. Walder. 2007. Modeling the Dynamical Response of a Crater Glacier to Lava-Dome Emplacement Mount St. Helens, Washington, U.S.A. *Ann. of Glaciol.*, **45**, 21-28.
- Price, S.F., R.A. Bindschadler, C.L. Hulbe, and D.D. Blankenship. 2002. Force balance along an inland tributary and onset to Ice Stream D, West Antarctica. *J. Glaciol.* **48**(160), 20-30.
- Price, S.F., R.A. Bindschadler, C.L. Hulbe and I. Joughin. 2001. Post-stagnation behavior in the upstream regions of Ice Stream C, West Antarctica. *J. Glaciol.*, **47**(157), 283-294.
- Price, S.F. and I.M. Whillans. 2001. Crevasse patterns at the onset to Ice Stream B, West Antarctica. *J. Glaciol.*, **47**(156), 29-36.
- Price, S.F. and I.M. Whillans. 1998. Delineation of a catchment boundary using velocity and elevation measurements. *Ann. Glaciol.*, **27**, 140-144.
- Price, S.F. 1998. Studies in the catchment and onset regions of Ice Stream B, West Antarctica. (masters thesis, The Ohio State University.)
- Price, S.F. 2006. Development and applications of a full-stress flowband model for ice. (Ph.D. thesis, University of Washington.)
- Dukowicz, J. K., S.F. Price, and W. H. Lipscomb. Consistent approximations for ice-sheet dynamics from a principle of least action. *J. Glaciol.*, submitted.
- Catania, G.A., T.A. Neumann, and S.F. Price. 2008. Characterizing englacial drainage in the ablation zone of the Greenland ice sheet. *J. Glaciol.* **54**(187), 567-578.
- Lipscomb, W.H., Bindschadler, R.A., Bueler, E., Johnson, J.V., Price, S.F. 2008. A community ice sheet model for sea level prediction. *EOS*, **3**, 23.
- Neumann, T.A., H.B. Conway, S.F. Price, E.D. Waddington, G.A. Catania, and D.L. Morse. 2008. Holocene accumulation and ice-sheet dynamics in central West Antarctica, *J. Geophys. Res.*, **113**, F02018, doi:10.1029/2007JF000764.
- Pattyn, F., Perichon, L., Aschwanden, A., Breuer, B., de Smedt, B., Gagliardini, O., Gudmundsson, G. H., Hindmarsh, R., Hubbard, A., Johnson, J. V., Kleiner, T., Kononov, Y., Martin, C., Payne, A. J., Pollard, D., Price, S., Ruckamp, M., Saito, F., Soucek, O., Sugiyama, S., and Zwinger, T. 2008. Benchmark experiments for higher-order and full-Stokes ice sheet models (ISMIP-HOM), *The Cryosphere*, **2**, 95-108.
- Joughin, I., S. Tulaczyk, R.A. Bindschadler, S.F. Price. 2002. Changes in west Antarctic ice stream velocities: Observation and analysis, *J. Geophys. Res.*, **107**(B11), 2289, doi:10.1029/2001JB001029.
- Joughin, I., L. Gray, R. Bindschadler, S. Price, D. Morse, C. Hulbe, K. Mattar and C. Werner. 1999. Tributaries of West Antarctic ice streams revealed by Radarsat interferometry. *Science*, **286** (5438), 283-286.